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10/687,643	10/20/2003	Tetsuya Mino	100186-00020	8971
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ARENT FOX KINTNER PLOTKIN & KAHN, PLLC			KIM, PAUL D	
Suite 600 1050 Connection	ut Avenue, N.W.		ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/687,643	MINO, TETSUYA	
Examiner	Art Unit	
Paul D. Kim	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

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Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues that the prior art of record fails to show the etching rate of the non-magentic layer, which is equal or higher than the magnetic material. Examiner traverses the argument. According to Figs. 13 and 16 of Cole, the track width (W) is formed by etching the first and second poles and a gap layer between the pole layers. If the gap layer has the etching rate higher than the pole layers, then the track width is not going to be the same with the pole layers. Therefore, the etching rate of the gap layer has an etching rate at least the same with the pole layers. However, Cole silent what material is used for the pole layers and the gap layer. The non-magnetic insulating layer located in between the pole tip layers of Katz is made of silicon oxide, which could have the etching rate at least equal or higher than the magnetic material. In addition to that the track width of the pole tip layers with the non-magnetic insulating layer of Katz as shown in Fig. 1 is the same. There is no evidence that the track width is increased or decreased or has a side fringe. Therefore, the etching of the non-magnetic insulating layer of Katz could have the etching rate at least equal with the magnetic material of the pole tips. Therefore, it would be obvious to modify the gap layer of Cole et al. by non-magnetic insulating layer made of silicon dioxide as taught by Katz in order to have a desired uniform track width. Applicant also argues that the first and second magnetic layers are not a matter of design choice. Examiner traverses the argument. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use the magnetic material with the non-magnetic insulating layer formed between the magnetic layers as recited in the claimed invention in order to produce a desired uniform track width. If one uses the higher etching rate non-magnetic insulating material, the desired uniform track width can not be formed. Also, if one uses the higher etching rate magnetic material than the non-magnetic insulating material, the desired uniform track width can not be formed. There is no specific combination in etching rate between the magnetic material and the non-magnetic insulating layer in the claimed invention. Therfore, exmainer maintains his position for rejecting the claims 1-4. It appears that the applicants' arguments are not persuasive in overcoming the prior rejections..